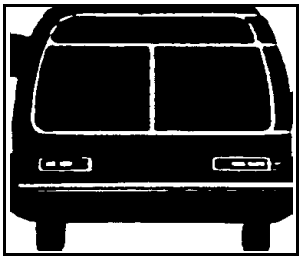
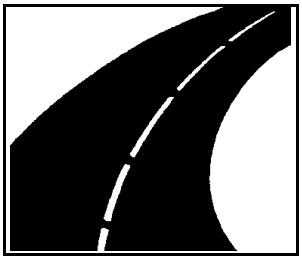
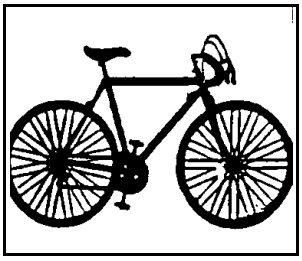
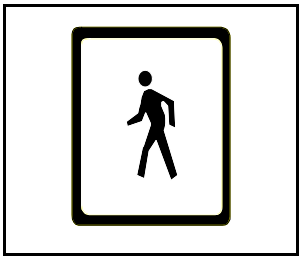
JANESVILLE AREA 2005-2035 LONG RANGE TRANSPORTATION PLAN









BICYCLE & PEDESTRIAN ELEMENT

May 10, 2006 Section III

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I. INTRODUCTION AND PURPOSE

The Janesville Area MPO Bicycle and Pedestrian Plan serves as a long-range action plan for development and construction of on-street and off-street bicycle and pedestrian facilities within the urban area. The plan proposes extensions to the linear trail system already established along the Rock River and throughout several greenbelt areas within the MPO planning boundary, and it initiates a recognizable on-street system designed to promote bicycle use and safety for cyclist traveling on arterial streets. This plan provides an overview of existing and funded street and mixed-use trail projects, outlines goals and objectives for enhancing multimodal travel and recreation within the urban area, and identifies an improvement program to be implemented between 2005 – 2035.

The bicycle and pedestrian plan has been developed for the Janesville area for several reasons. The plan responds to the increased public interest in trails, walkways, and on-street bike provisions for both recreation and transportation access by defining corridors where bicycles and pedestrian accommodations would most benefit the community. The plan also documents the strengths and weaknesses of the current system and the policies which guide alternative mode planning in the urban area. Finally, the plan addresses the goals of the Transportation Equity Act of 1998 (TEA-21) which places great emphasis on non-traditional modes of transportation and requires that States and MPO's develop transportation plans that include bicycle and pedestrian projects and programs.

II. GOALS AND OBJECTIVES

Janesville's existing bicycle and pedestrian system provides a strong foundation for improving mobility and offering an enjoyable form of recreation. This plan seeks to encourage and provide for continued growth in the number of trips taken by bicyclists and pedestrians for all transportation purposes while also maintaining proper safety standards. Both off-road trails and shared roadway bicycle/pedestrian facilities are important to a balanced transportation network that serves the needs of all potential user groups. The following goals and objectives reflect what the MPO expects to accomplish over the next twenty five years in regards to developing an effective, efficient bicycle and pedestrian network.

GOAL: Develop a multi-modal transportation network within the Janesville Metropolitan Planning area that accommodates all modes of transportation and recreation and provides for the safe, efficient movement of people and goods.

OBJECTIVES:

- Develop an on-street and off-street bicycle facility network that serves as a viable transportation option for beginning to advanced cyclists.

- Provide bicycle and pedestrian facilities between residential areas and existing and planned school facilities, parks and recreational facilities, other pubic facilities, and employment and commercial centers.

- Provide cyclists with safe and convenient travel by making streets "bicycle friendly" and well designed to accommodate both motorized and non-motorized modes of transportation.

- Gain input from bicyclists and the general public in the planning and development of bicycle and pedestrian facilities.

- Develop education and safety programs aimed at children (for walking and biking), experienced bicyclists, and motor vehicle operators.

- Encourage active enforcement of existing laws for motor vehicle operators regarding the rights of bicyclists and pedestrians.

III. EXISTING CONDITIONS

ROCK COUNTY

Rock County is in the process of updating the Rock County Comprehensive Development Plan which includes a sub-element of the Transportation Element entitled the Rock County Bicycle and Pedestrian Routes and Trails Plan. A preliminary map of a county-wide network of existing and proposed bicycle facilities, both on- and off-road was reviewed for consistency with this Plan. The proposed Rock County bicycle network ties into the existing City of Janesville Bicycle Trail system, and the segment of the Ice Age Trail in the City of Milton. Additional recommendations are for off-road linkages between Milton and Janesville via State Highway 26 and the abandoned Union Pacific Railroad right-of-way, and improvements to County Highway D between Janesville and Beloit.

CITY OF BELOIT

The City of Beloit lies just south of the Janesville Area MPO and its bicycle and pedestrian facility planning is done as part of the State Line Area Transportation Study. Due to the proximity between the two planning areas however, a brief summary of the Beloit bicycle and pedestrian planning efforts is necessary to gain a regional understanding of the bicycle and pedestrian network.

The *Stateline Area Bicycle and Pedestrian System Plan* was adopted in February of 2004. The plan serves as an update to their 1994 Bicycle and Pedestrian Plan. The planning area encompassed the City of Beloit and the surrounding cities, villages, and towns in Wisconsin and Illinois. The States of Wisconsin and Illinois and Rock County (WI) and Winnebago County (IL) were involved in the plan development. Major issues addressed include regional biking and walking suitability analysis, public participation summary, recommendations, and plan implementation.

Recommendations in the plan include on-street bicycling recommendations, bicycle lanes, routes, or paved shoulders; off street multi-use path system recommendations; intersection improvement recommendations; sidewalk path & walkway recommendations; and overpass/underpass recommendations.

CITY OF MILTON

The City of Milton does not have any off-road bicycle trails. However, the State of Wisconsin Ice Age trail passes through the City following local streets from West High Street on the west side of the City to Storrs Lake Road on the East. In addition, an on-road portion of the Rock County Bikeway System follows Monogue Road east to South John Paul Road, and north to Madison Avenue. The bikeway system also follows along STH 26 heading northeast along Bowers Lake Road and southeast along CTH M.

CITY OF JANESVILLE

The City of Janesville has taken advantage of federal and state funding initiatives for multi-modal transportation in recent years. The result is a combination of on-street and off-street bicycle and pedestrian facilities that serve as popular recreation sources and also provide access to parks, schools, public institutions, and the central business district.

The City of Janesville has a comprehensive off road multiuse trail network along the linear open space corridors fronting the Rock River and Spring Brook. This trail system includes the Kiwanis Trail, Spring Brook Trail, and the Rock Trail. Existing and funded trails are depicted in Figure III-1, and the following descriptions provide greater detail on existing trails and projects that have been funded for construction.

Existing and Funded Segments

On-Street Routes

Existing "officially designated" shared road facilities in Janesville consist of the remnants of two circuitous routes designated in 1975 as part of a 38-mile long Bicentennial Bikeway System. Signs were erected for these two loops, one in the area south of the Rock River and west of Jackson Street and the other East of Randall Street between Black Bridge Road and Racine Streets, which were part of a four loop system. The two central loops were never signed for budgetary reasons. Over time these signed routes have been somewhat forgotten as the City successfully implemented its off-street trail network. Other than these remnants of a designated on-street system, the current on-street facilities consist of undesignated "local knowledge" arterials between major activity nodes.

Off-Street Trails

Spring Brook Trail / East Greenbelt – Beginning at the corner of Rockport Road and Franklin Street, this 4.8 mile ten-foot wide paved trail follows Spring Brook connecting downtown Janesville to Dawson Field, Rotary Gardens, and Palmer Park. The Trail divides just west of Wright Road to continue on in north and east directions. The east bound trail section continues to follow Spring Brook, eventually connecting to the Youth Sports Complex and terminating at the corner of STH 11 and Wuthering Hills Drive. The north bound trail section follows the eastside greenbelt network, eventually connecting to STH 14 and terminating at Sandhill Drive.

Kiwanis Trail & Downtown Connector – The Kiwanis/Downtown Trail follows the west bank of the Rock River between Riverside Park and the central business district. The 3 mile paved trail extends from Riverside Park south to Mercy Hospital where a paved trailhead and parking lot are provided for users. The trail consists of 1.5 miles of paved/on-street trail from the Rockport Rd./Franklin St.

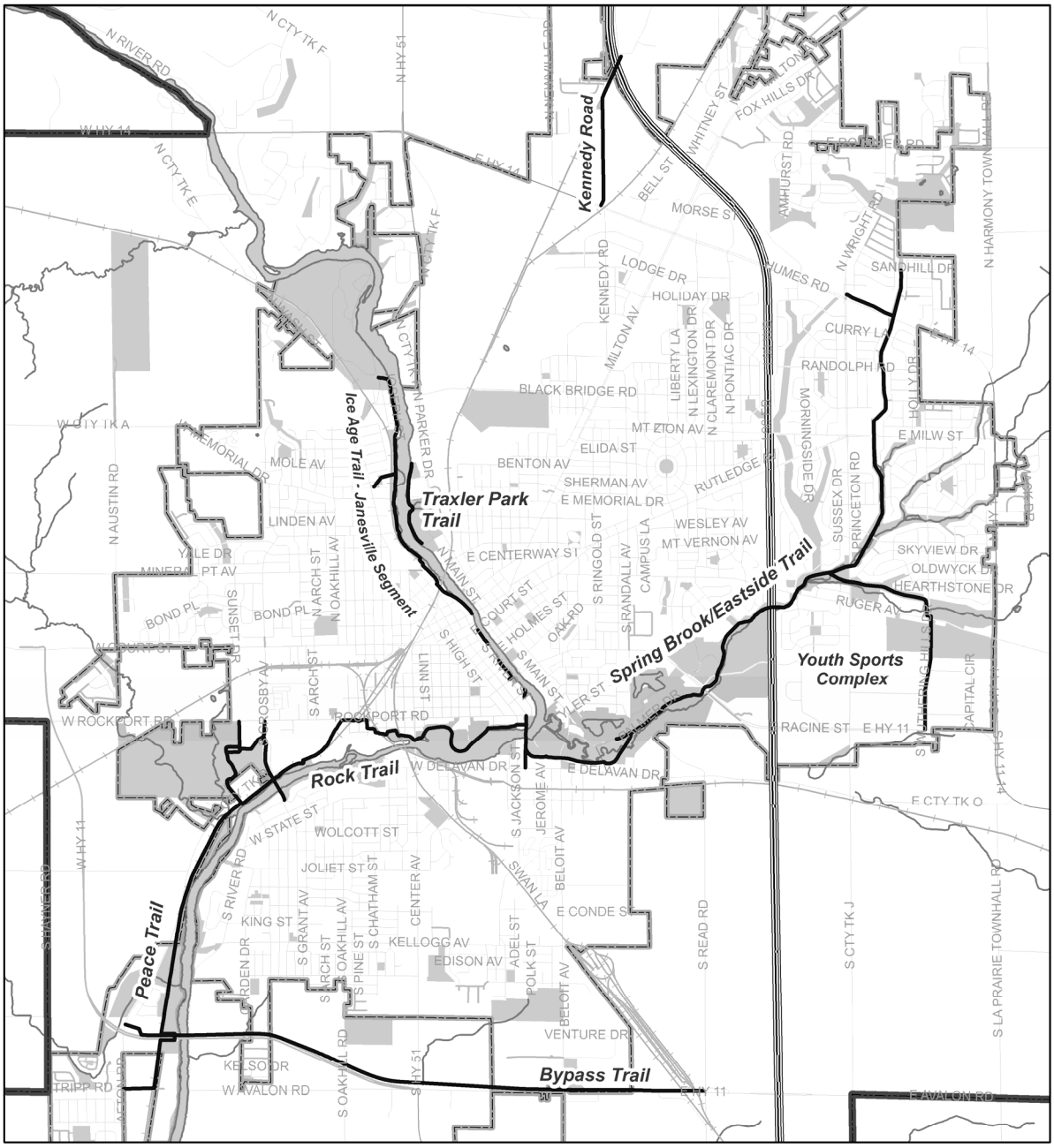
intersection north to Milwaukee Street, and 1.5 miles of trail connecting downtown Janesville with Riverside Park. It is important to note that from Rockport Road to Milwaukee Street the trail uses primarily city streets.

Rock Trail / Peace Trail – A paved section of the Rock Trail follows the contour of the Rock River extending from the Rockport Rd./Franklin St. intersection, through Monterey Park, to Rockport Park where it formally becomes the Peace Trail. The Peace Trail section continues down the west bank of the Rock River and terminates at Loch Lomond Subdivision west of Afton Road.

South Loop Trail – Beginning at Afton Road and Highway 11, this 3 mile trail section heads east following the Highway 11 Bypass to Read Rd. From the Bypass the trail heads north along Read Rd. to Sharon Rd. where eventually connects with the Spring Brook Trail in Palmer Park.

Kennedy Road – off road paved trail/sidewalk on the West side of Kennedy Road from HWY 14 to the Ice Age Trailhead, then transitioning to a crushed rock trail to Brentwood Drive.

FIGURE III-1. EXISTING AND FUNDED BICYCLE/PEDESTRIAN SYSTEM



2005 - 2035 Janesville Area MPO Transportation Plan	FIG III-1	EXISTING AND FUNDED BICYCLE & PEDESTRIAN TRAIL SYSTEM

IV. FACILITY DEVELOPMENT PROCESS

The objectives of this plan help to define *where* bicycle and pedestrian facilities will be developed and *what type* of bicycle and pedestrian facilities will be constructed. Connections between parks, specialized recreation facilities, and public centers are very important to the Janesville Area MPO. Convenient access, safety, varying levels of bicycling experience, and of course financial resources, will affect the decision as to what type of facilities will be constructed within the Janesville Area MPO planning area. In regards to bicycle facilities, bike paths are often preferred means of travel for less-experienced or younger bicyclists. In cases where bike lanes or wide curb lanes are recommended, widening pavement or striping will be included as part of a scheduled construction project on that roadway. Planning criteria are used to determine the best kind of facilities to develop for both pedestrian and bicyclists. The following two sections discuss factors that need to be examined when deciding what type of bicycle and pedestrian facilities to construct.

BICYCLE FACILITIES

There are three steps in the decision-making process of locating bicycle trail or on-street bike routes. The three steps are:

1. Identification of a bicycle corridor
2. Site the bicycle route along a street network
3. Selection of bicycle facility type

1. Identification of a Bicycle Corridor

Factors to consider when identifying potential corridors for bicycle routes include:

A. Usage

Potential use of facilities is best determined by identifying land uses that generate bicycle traffic. Examples of such uses include:

- Employment centers
- Retail and commercial facilities
- Mode transfer points (transit center, intercity bike routes)
- Parks and recreational facilities
- Schools and colleges
- Neighborhoods

Two other elements that also need to be taken into consideration include:

- Area demographics
- Trip length (varies according to skill and trip purpose)

B. Accessibility/Spacing

Convenient bicycle access is important to the location of a designated bicycle route. An appropriate distance is established that measures how far a trip origin or destination is located away from a bicycle route. As a rule, the routes will be planned so that major residential areas within the city are within approximately ½ mile of a designated bicycle route facility. (Physical barriers, such as the Rock River, may require adjustments to this general rule.) In addition, primary destinations within the city such as downtown, schools, major employment and shopping areas and parks and recreation facilities should be served by bicycle facilities.

C. Directness

Bicycle facilities should connect major traffic generators along the best line for users. It is important to note that cyclists or pedestrians, similar to any motorist, usually prefer the most direct route in linking origin and destination. This is especially true of the utilitarian trip purpose as opposed to the recreational trip. If the pavement quality or directness of a designated route is inferior to an adjacent route, the likelihood of route usage will diminish. Over a short distance, most cyclists will not deviate more than two blocks off a direct route just to use a designated route.

D. Continuity

The MPO's bicycle system should be free of missing links or gaps and connect, at the periphery to designated bikeway routes of the county system. If barriers exist within the city, these should be addressed as planned improvements targeted for future implementation.

E. Barriers

Janesville's physical boundaries to route development are the Rock River and I-90. Narrow pavement on bridges or at interstate underpasses combined with limited right-of-way may restrict the type of facilities that can be constructed at these locations without major reconstruction. Terrain is another physical barrier that limits the number of routes used by bicyclists. There are several grades within the City of Janesville that could be considered steep by inexperienced bicyclists especially in the Courthouse Hill area

F. Aesthetics

Though not of primary importance, this factor should be considered along with all other factors in selection of a designated route. For example, within the City of Janesville, most off-road facilities will be traveling through wooded or park settings providing an enjoyable pleasing environment for the user.

G. Security

Though not too much of a problem within the MPO Area at this time, care will be taken to choose routes that are located in areas that are perceived as relatively safe for all ages to use. Problems with bicycle routes that are too remote or vandalism along a route or in a parking area will be considered in corridor selections.

2. Site Bicycle Route along a Street Network

A. Directness

Directness is a factor to consider when identifying a bicycle corridor and is also important when establishing a bike route on a street. It is understood that bicyclists prefer a through route even if that route might be a busy thoroughfare. A route that shifts the user off the main road onto an adjacent, less traveled street will often add distance to the trip that the bicyclists is not willing to accept. Additionally, the main road will likely have more destination points that the bicyclist will be accessing which makes the less-traveled routes less attractive to use.

B. Delays

Bicyclists have a strong desire to maintain momentum. A less-traveled route may require the bicyclists to stop more frequently at every intersection which decreases route attractiveness. The number of stops on less- traveled roads should be reduced if designated as a bike route. Travel on the designated route will then entail fewer stops and, in general, decrease potential conflict points for bicyclists.

C. Safety

The most appropriate bicycle facility should be chosen for each specific section of roadway to ensure that the facility is both safe and operational. Traffic factors to consider in selecting a bicycle facility along a given corridor include: traffic volumes, average motor vehicle speeds, traffic mix (car, truck, and bus), on-street parking (turnover rate, average number of parked cars), sight distance, and the number of intersections and driveways.

D. Street Design

The type of on-street bicycle facilities recommended is partially based on the width of the street being considered for designation as a bike route. Streets can be selected for signing or striping without major reconstruction if the existing cross-section accommodates AASHTO guidelines for wide curb lanes or bike lanes or if parking is removed from one or both sides of street. The Janesville Planning Area street standards require that primary arterials are constructed with a minimum 52-foot wide pavement width, and two-lane standard arterials are constructed at 44 to 56-foot width. Collector streets are typically 40 feet wide and local streets are constructed at a 28 or 36-foot width. AASHTO recommends a 14 foot width for wide curb lanes from the pavement joint at the gutter pan to the center lane strip. Local streets with low volumes may have adequate widths to accommodate bicyclists and vehicles on a shared roadway. When possible, streets with wide lanes should be considered for bicycle routes since the cost of signing those streets as bike routes would be significantly lower than reconstructing narrower streets. In the Janesville area, options exist to remove parking from one or both sides, decrease gutter pan widths, or re-stripe center lines to increase available pavement for bicyclists and vehicles. A more detailed discussion of street standards and roadway accommodations for cyclists are discussed in the highway section of the long range plan.

E. Cost

The chosen type of bicycle facility for a specific route will depend on certain cost considerations. Limitations on funding could limit the choice of bicycle facilities. The cost of maintaining a facility is a further factor in bicycle facility type.

F. Implementation

Factors affecting ease of implementing a recommended bicycle facility are many. Often neighborhood politics come into play as well as more tangible factors such as traffic conditions, on-street parking, and amount of bicycle space or right-of-way available. Compromises are ultimately made that result in projects proceeding when deemed favorable by all parties or when funds become available.

3. Selection of Bicycle Facility Type

Once route is identified as a potential bicycle facility corridor, a facility type must be selected. Facility types depend on the characteristics of a specific street or trail right-of-way and ridership levels expected on the facility.

There are five types of bicycle facilities:

- Shared Roadway
- Wide Curb Lanes
- Paved Shoulders
- Bike Lanes
- Bike Paths/Multi-use Trails

As stated previously, bicycle facilities are recommended according to traffic volumes, the ratio of cars to trucks or heavy vehicles using the roadway, and speed limit. Each of the five types of bicycle facilities are briefly described and illustrated below.

Shared Roadway

On a shared roadway facility, bicyclists and motorists are accommodated in the same travel lane. Narrow roadway widths or parked cars make it necessary for vehicles to cross over into the oncoming travel lane when passing a bike. This facility type is common along low volume city streets and narrow town roads and County Trunk Highways. Traffic volumes are normally low and most of these roadways are currently suitable for bicyclists.

Wide Curb Lane

A curb lane of 12-14 feet (minimum) in width is provided to accommodate both the bicyclist and motor vehicles. This is measured from the lane strip to the longitudinal joint with the gutter section of the curb where no parking is permitted in the curb lane. Approximately 2.0 feet is allowed for curb and gutter with 14 feet allowed for the driving lane even without a longitudinal joint. On a 4-lane arterial, the inner lane may be decreased to 11 feet. For this calculation, the distance from the curb face to the joint line is considered unsuitable for bicycle riding. When parking is permitted in the curb lane, a minimum width of 13 feet, measured from the gutter pan to the through travel lane strip should be available. Motorists should not

have to change lanes when passing a bicyclist. A wide curb lane is not striped. This facility type is most common on multi-lane arterials and collectors with higher traffic volumes.

Bike Lane

A bicycle lane is delineated by an actual painted mark on the roadway that provides a dedicated area for bicycle riders. A bike lane is a one-way facility. The minimum width for a bike lane varies from 4 feet to 6 feet to the left of a parked motor vehicle or 5 feet minimum from the curb where no parking is permitted. Bike lanes are common on urban arterials or collectors when right-of-way is available.

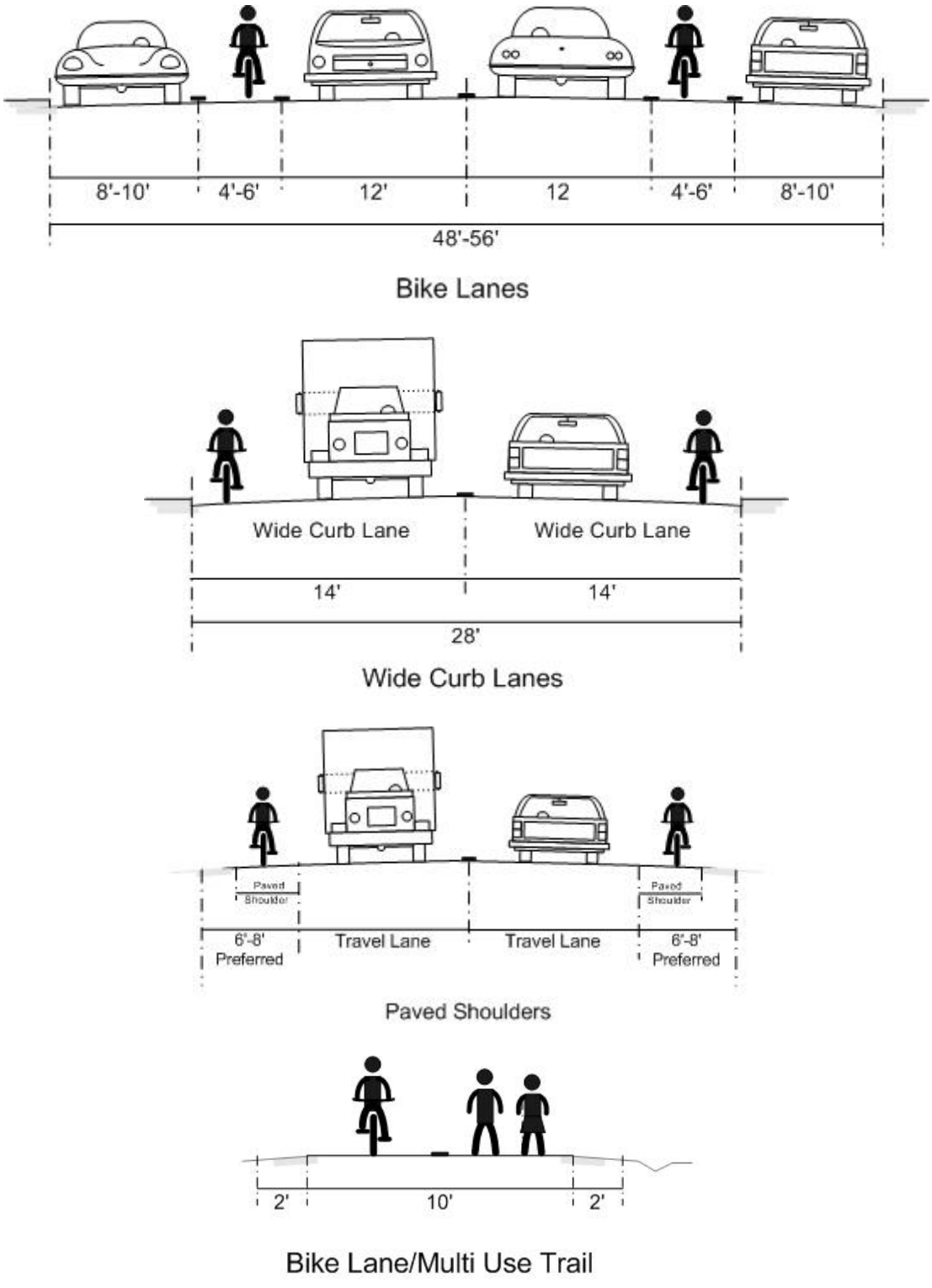
Paved Shoulders

A paved shoulder of 6-8 feet in width is a good accommodation for bicyclists along rural highways, especially along major arterials that radiate from the urbanized area. A roadway with paved shoulders less than 4 feet in width should be carefully considered for designation as a bike route, however, shoulder width is ultimately dependent on traffic volume and speed. The minimum width allows motor vehicle traffic to overtake the rider without having to swerve.

Bike Path/Trail

This type of facility is physically separated from motor vehicle traffic by open space or barrier. A bike path is usually a two-way facility and should be placed where there are few intersecting roads or driveways. Bike paths or multi-use trails are appropriate for abandoned railroad lines, greenbelts, and along graded river banks but rarely along urban roadways. The recommended minimum width for paved bike path is 10 feet. A 2-foot clear zone adjacent to both sides of a bike path is also recommended. An open space or barrier of 5 feet in width (minimum) is required when a bike path parallels a roadway in order to safely separate motor vehicles from bikes.

FIGURE III-2. EXAMPLE BICYCLE FACILITY STREET CROSS SECTIONS



Source: Wisconsin Bicycle Transportation Plan 2020

Traffic Volumes and Functional Classification

The final factors that should be considered when analyzing existing bicycle conditions are the functional classification of routes and the amount of vehicular traffic that travels on the routes. The Janesville MPO Planning Area functional classification system and average daily traffic volumes (ADTs) are shown on Figures III-3 and III-4, respectively. Functional classification, average daily traffic volumes, and speed limits are interrelated and affect bicyclists' route preferences, thus road type ultimately affects the type of bike facilities to be constructed. If the option is available, it is preferable that bicyclists are able to reach their destination on streets classified as minor arterial or lower as these streets have lower traffic volumes than principal arterials. When the most direct route is a principal arterial with higher traffic volumes, however, improvements such as bike lanes or combination transit/bike lanes may need to be installed. Wide curb lanes are usually adequate for minor arterials with higher ADTs. Lower volume urban streets may be treated as shared roadway, and in rural areas, lower volume roads may be made safer by constructing paved shoulders.

Although functional classification and volumes are important factors to consider when designating on-street bike facilities in the planning area, it should be noted that local conditions may be weighted against general guidelines. Additional analysis and public comment on bicycle and pedestrian facilities will be considered by the Janesville Area MPO and WisDOT at the time when arterials such as Court Street, Milton Avenue, USH 14, USH 51, and the Rock River bridges are reconstructed. On rural roads within the planning area, paved shoulders are typically the only-type of on-road bike facilities constructed and the construction typically occurs during road widening, reconstruction, or new construction. Five feet is the standard width for accommodating bikes on the shoulder, but the width can be widened for principal or minor arterials. As with urban streets, local knowledge of terrain, driving habits, traffic patterns, and right-of-way constraints will ultimately decide the type of facilities appropriate for each community.

PEDESTRIAN FACILITIES

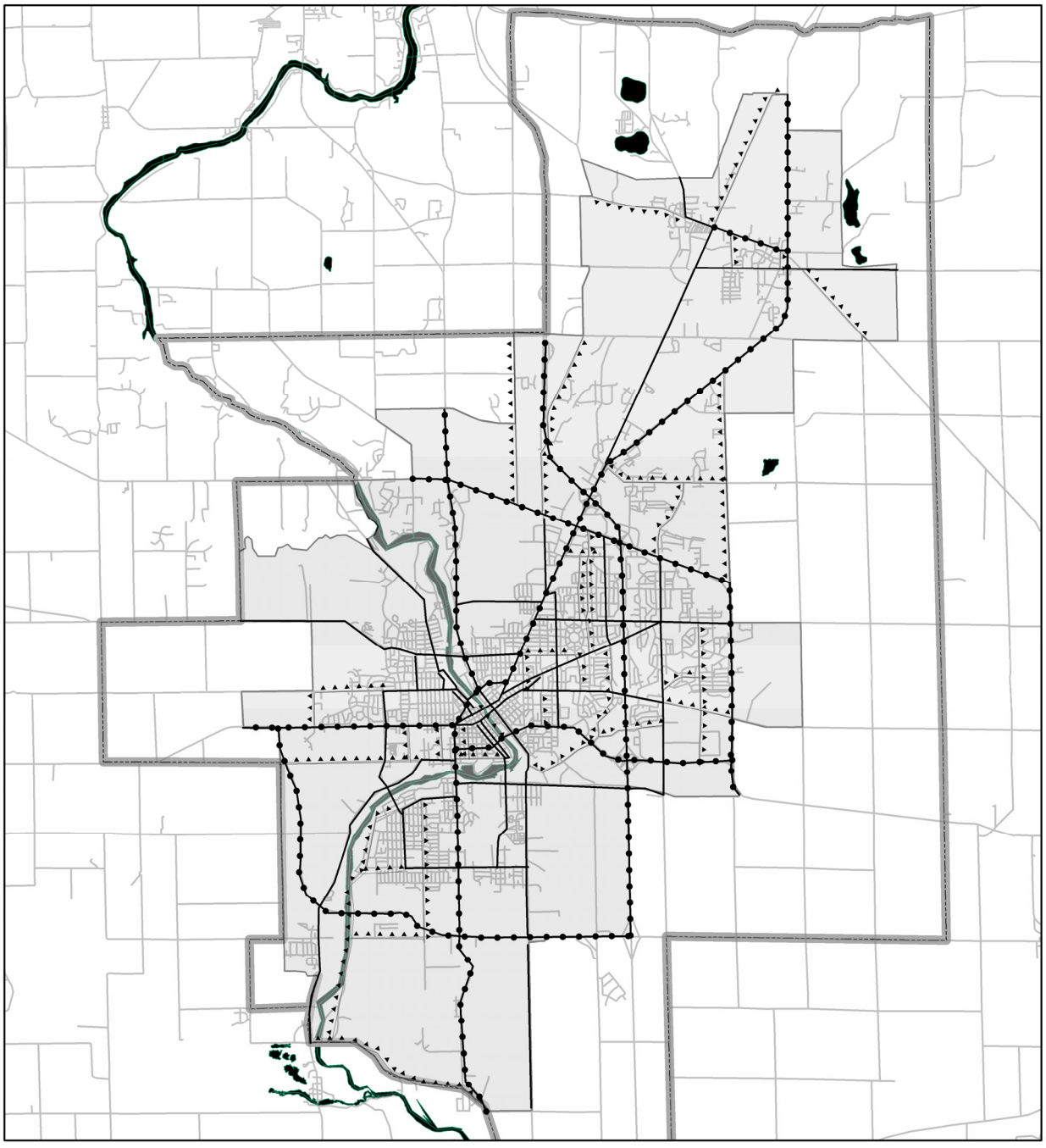
The most common type of pedestrian facility in the Janesville Area MPO is the sidewalk. Pedestrians also make extensive use of the bicycle trail system, primarily for recreation purposes. In addition to sidewalks, dedicated public walkways connect residential districts to neighborhood, community, and regional parks. Provision of public access walkways within the Janesville Area MPO is governed by local policies determined by the City of Janesville, the City of Milton, and Rock County within each of their jurisdictions.

Additional pedestrian facilities include walkways, raised or colored crosswalks, pedestrian medians or refuge islands, curb extensions or bulb outs, signal timing and push buttons, pedestrian bridges, and a multitude of traffic calming measure that are beneficial to pedestrian safety and convenience. In addition, the pedestrian environment can be improved greatly through the land development and site planning process. Encouraging building that is more appropriate to the pedestrian scale than the automobile scale will result in more pedestrian friendly environments where people will not be afraid to walk.

The decision making process for locating pedestrian facilities is less involved than for identifying and providing bicycle facilities. In general all urban areas with significant population have the need for a linked pedestrian network of sidewalks and off road paths. In addition, rural areas with residential

development should also provide pedestrian facilities that ensure safe and convenient linkages between complimentary land uses. These facilities should adhere to the concept of universal design, or for the majority of all users – including the elderly, children and people who are disabled.

FIGURE III-3. FUNCTIONAL CLASSIFICATION SYSTEM



2005 - 2035 Janesville Area MPO Transportation Plan	FIG. III-3	Functional Classification System Bicycle & Pedestrian Plan